

REMARKS

Claims 1-27 are pending in the application and stand rejected. Claim 2 is amended herein. The rejections are traversed as set forth below.

The drawings are objected to by the Examiner as set forth in the Notice of Draftperson's Patent Drawing Review for alleged non-compliance with 37 CFR § 1.84(g) and 1.84(l). Applicants will submit clarifying formal drawings upon receipt of Notice of Allowance.

The Examiner has objected to the Inventors' Declaration. (See item 12, Office Action Summary of December 4, 2003). Applicants will submit a supplemental Inventors' Declaration in a subsequent submission.

The specification is objected to regarding the identification of related patent applications. The specification is amended, as set forth above, to identify each of the related applications incorporated by reference in the present application.

Claims 1, 17 and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over U.S. Patent No. 6,587,741 to Chetta et al. entitled "Method and System for Designing a Spline Coupling", (hereinafter referred to as "Chetta 1") and U.S. Patent No. 6,393,331 to Chetta et al. entitled "Method of Designing a Turbine Blade Outer Air Seal", (hereinafter referred to as "Chetta 2").

To establish an obviousness-type double patenting rejection the Examiner must:

- 1) identify the inventions claimed in the claims under consideration and in the patent claims; that is, the Examiner must identify a claim of the patent that is compared to each of the rejected claims of the application; and 2) the Examiner must establish that any

variation between the inventions claimed in the claims under consideration and the earlier-issued patent claims would have been obvious to a person of ordinary skill in the art. Further, when considering whether the invention defined in a claim of the application is an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art. (See MPEP, § 804 II. B. 1.).

Here, the Examiner has not identified any claims of the Chetta 1 or Chetta 2 patents to support the double patenting rejection of claims 1, 17, and 22 of the present application. Further, the reasons for the double patenting rejections of claims 1, 17 and 22 set forth by the Examiner indicate that the Examiner has improperly based the double patenting rejections on the written descriptions of the Chetta 1 and Chetta 2 patents as opposed to the claims thereof. (See Office Action p. 4, l. 19). Accordingly, for at least the above-identified reasons, the Examiner has not established a prima facie showing of obviousness sufficient to support a double patenting rejection of Applicants' claims 1, 17 and 22. Thus, the non-statutory double patenting rejection of claims 1, 17 and 22 should be withdrawn and this action is respectfully requested.

Claims 1-6 and 10-22 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Chetta 2. The rejection is traversed and reconsideration is respectfully requested.

Chetta 2 is directed to a method of designing an outer air seal for the turbine blades of a gas turbine engine. The method utilizes a knowledge-based product model software program for generating a parametric, three-dimensional, geometric model of an outer air seal for the turbine blades of a gas turbine engine. The product model software is embodied in a knowledge-based engineering system. The model is created by the software program through user selection of various structural feature options

available for the outer air seal. The product model software program uses its internal knowledge base of configuration dependent parameter relationships and rules to design the model. Various types of analyses may then be run to validate the model. The model may be changed, if necessary, as a result of the analyses. The outer air seal model output from the product model software program is in a file format that defines the topology and dimensions of the geometry of the outer air seal. Other software programs may then use this product model output file in various ways, such as to regenerate the model for use in a CAD system.

103 → In contrast to the disclosure of the Chetta 2 reference, independent claims 1 and 17 of the present application are each directed to a method of designing an engine case static structure of a gas turbine engine. Independent claims 21 and 22 are each directed to a computerized system for designing an engine case static structure of a gas turbine engine. All of claims 1, 17, 21 and 22 include limitations, not taught or suggested in Chetta 2, that are specifically related to the design of an engine case static structure for a gas turbine engine.

For example, claims 1 and 17 each recite providing a knowledge base of information having a plurality of design rule signals with respect to a corresponding plurality of parameter signals of associated elements of an engine case static structure, wherein the engine case static structure knowledge base comprises a data value signal for each one of the plurality of design rule signals. Likewise, claims 21 and 22 each include a limitation directed to an engine case static structure knowledge base including a plurality of engine case static structure design parameters corresponding to a plurality of design rule signals for creating a geometric representation of an engine case static structure.

Chetta 2 does not teach a method or system directed to the design of an engine case static structure for a gas turbine engine as recited in independent claims 1, 17, 21 and 22 of the present application. Further, Chetta 2 does not disclose providing a knowledge base of parameters of design rules having a plurality of design rule signals with respect to a corresponding plurality of parameter signals of associated elements of an engine case static structure, as recited in claims 1 and 17. Yet further, Chetta 2 does not disclose a computerized system for designing an engine case static structure including an engine case static structure knowledge base having a plurality of design rule signals for generating signals representing an engine case static structure, as recited in claims 21 and 22.

To support the rejection of claims 1, 17, 21 and 22, with respect to the knowledge base of parameters of design rules for an engine case static structure for a gas turbine engine, the Examiner has identified column 19, line 26 of Chetta 2, which reads "1. A method of creating a model of an outer air seal for a". Nothing in column 19, line 26 of Chetta 2 discloses providing a knowledge base of information having a plurality of parameters of design rules for a static case for a gas turbine engine, as recited in claims 1, 17, 21 and 22. Further, nothing in the Chetta 2 reference teaches providing a knowledge base of parameters of design rules for an engine case static structure for a gas turbine engine. Thus, nothing in Chetta 2 discloses a system and method for designing an engine case static structure for a gas turbine engine, as recited in claims 1, 17, 21 and 22.

To support an anticipation rejection under 35 U.S.C. § 102 each and every element or limitation in the rejected claim must be disclosed in a single prior art reference used in the claim rejection.

Because Chetta 2 does not teach each and every element or limitation recited in independent claims 1, 17, 21 and 22, it cannot be maintained that these independent claims are anticipated by Chetta 2. Moreover, because claims 2-6, 10-16 and 18-20 each ultimately depend from and thereby incorporate the limitations of one of these independent claims, the dependent claims are likewise deemed not anticipated by Chetta 2 for at least the reasons set forth for the independent claims.

Claims 7, 8, 9, 23, 24, 25, 26 and 27 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chetta 2 in view of U.S. Patent No. 6,625,507 to Dickerson et al. (hereinafter referred to as "Dickerson"). The rejection is traversed and reconsideration is respectfully requested.

Claims 7, 8 and 9 each depend from and thereby incorporate the limitations of claim 1. Claims 23-27 each ultimately depend from and thereby incorporate the limitations of claim 22. It has been demonstrated above that Chetta 2 includes insufficient teaching to anticipate independent claims 1 and 22. It therefore follows that Chetta 2 contains insufficient teaching when taken either alone or in combination with Dickerson to render claims 7-9 and 23-27 obvious.

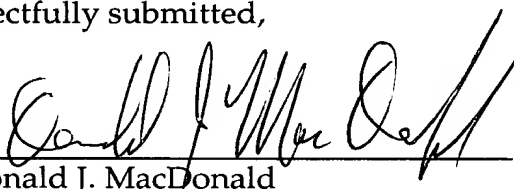
CONCLUSION

In view of the foregoing, it is respectfully submitted that pending claims 1-27 are in condition for allowance, and action to that effect is earnestly solicited.

Applicant believes that no fees or deficiencies in fees are owed. However, authorization is hereby given to charge any such fees owed to our Deposit Account No. 13-0235.

Respectfully submitted,

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